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EXAMINER

ANDERSON, CATHARINE L

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Please find below and/or attached an Office communication concerning this application or proceeding.



## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 15 June 2006 have been fully considered but they are not persuasive.

In response to the applicant's argument that Roe fails to disclose "cellulosic nits" as defined in the specification, it is noted that the definition given in the present specification for "nits" merely gives a general description of the shape and size of the "nits." The specification states on page 7, lines 30-34, the nits have an "irregular" shape, though more regular shapes are within the scope of the definition. While the specification defines "nits" as being generally particulate, no further description of "particulate" is given. Therefore, the definition of "nits" given in the specification is not clear and concise since the definition provides for a wide variety of shapes and sizes. The cellulosic batts disclosed by Roe, while not explicitly described as "nits," fulfill the broad definition of "nits" given in the present specification since the cellulosic batts comprise entangled cellulosic fibers and have an irregular shape.

In response to the applicant's argument that Roe fails to disclose "free-flowing" nits, it is noted that the definition of "free-flowing" given in the present specification differentiates between "free-flowing" particles which are loose and dry, and materials which deform under pressure such as clay. The cellulosic batts of Roe are loose and dry, and are not physically similar to clay in the least. Therefore, the cellulosic batts of Roe will be able to move freely against each other and will not merely deform like clay.

In response to the applicant's argument that the lotion of Roe does not act as a lubricant, it is noted that the lotion disclosed by Roe ('588) comprises the chemical components claimed as the nit conditioner. While not disclosed as intended to be used as a "nit conditioner," the lotion of Roe fulfills the claimed limitations because if the composition is physically the same, it must exhibit the same physical properties. Therefore, the lotion of Roe exhibits the lubrication and conditioning properties of the claimed invention.

In response to the applicant's argument that Roe fails to disclose a wicking barrier, it is noted that Roe discloses in column 19, lines 56-59, a scrim or web separating the nits from other portions of the article. A scrim or web is liquid permeable and provides a physical barrier between the nits and other portions of the article. Therefore, the scrim or web of Roe fulfills the claimed limitation of a wicking barrier.

In response to the applicant's argument that Roe fails to disclose an angle of repose of less than about 70 degrees, it is noted that the claimed range does not have a lower limit, and therefore any angle is encompassed within the range.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1, 2, 6, 14, 16-19, 21, 24-28, 31-35, 37, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Roe et al. (6,156,020).

With respect to claim 1, Roe discloses an absorbent article 20, as shown in figure 5, comprising a pouch 152 containing nits 172. The nits 172 are particles of cellulosic batts, as disclosed in column 19, lines 37-38. The pouch 152 further comprises a nit conditioner, as disclosed in column 19, lines 43-45.

With respect to claim 2, the nit conditioner comprises a lubricant in the form of a lotion, as disclosed in column 19, lines 43-45.

With respect to claim 6, the nit conditioner comprises hydrophobic matter in the form of a lotion, as disclosed in column 19, lines 43-45.

With respect to claim 14, the nits inherently have an angle of repose, which would fall into the range of 70 degrees or less, as the range enables angles between 70 and -290 degrees.

With respect to claims 16 and 18, the nits 172 have a particle size of 0.5 mm, as disclosed in column 19, line 1. Since 100% of the nits 172 have a particle size of 0.5 mm, the pouch is free of particles with a size greater than 0.85 mm.

With respect to claim 17, the claim discloses an article, not the method of making the article. Roe discloses an article comprising nits and a chemical additive in the form of the nit conditioner.

With respect to claim 19, the pouch 152 comprises superabsorbent particles, as disclosed in column 19, line 39.

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With respect to claim 21, Roe discloses an absorbent article 20, as shown in figure 5, having a longitudinal axis 100, a transverse axis 110, two longitudinal sides 50, and a target zone 120. The article 20 comprises a liquid impervious backsheet 26 and a liquid pervious topsheet 24, as shown in figures 6 and 6a. The article 20 further comprises a pouch 152 containing free-flowing particles 172. The pouch 152 is laterally surrounded by an outer shaping member 210, as described in column 19, lines 18-20. A wicking barrier, as described in column 19, lines 56-59, separates at least a portion of the pouch 152 from the outer shaping member 210.

With respect to claim 24, the free-flowing particles 172 are beads, as disclosed in column 19, lines 64-65.

With respect to claim 25, the free-flowing particles 172 comprise 100% by weight nits.

With respect to claim 26, the free-flowing particles 172 are free of clay.

With respect to claims 27 and 28, 100% by mass of the free-flowing particles 172 have a particle size of 500 microns, as disclosed in column 19, line 1.

With respect to claims 31-33, the pouch 152 comprises an odor control agent and enzyme, as disclosed in column 19, lines 43-45.

With respect to claims 34, the pouch 152 comprises superabsorbent particles, as disclosed in column 19, line 39.

With respect to claim 35, the free-flowing particles 172 comprise cellulosic fibers, as disclosed in column 19, lines 37-38, and a lubricant in the form of a lotion, as disclosed in column 19, lines 43-45.

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With respect to claim 37, the free-flowing particles 172 comprise cellulosic fibers, as disclosed in column 19, lines 37-38, and hydrophobic matter in the form of a lotion, as disclosed in column 19, lines 43-45.

With respect to claim 39, the wicking barrier is a film, as disclosed in column 19, lines 56-59.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Chauvette et al. (5,649,915).

Chauvette discloses a pouch 20, as shown in figure 4, containing cellulosic nits 12 comprising cellulose fibers, and a nit conditioner comprising a hydrophilic debonder, as disclosed in column 6, lines 54-67.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4, 7-9, 11, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al. (6,156,020) in view of Roe et al. (5,643,588).

Roe (-020) discloses all aspects of the claimed invention but remains silent as to the type of lotion that may be used as the nit conditioner. Roe (-588) discloses the use of a lotion in an absorbent article, the lotion comprising mineral oil or mineral wax, as

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described in column 11, lines 6-7, both of which work to sooth and moisturize skin, as described in column 10, lines 39-43.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to use mineral oil or mineral wax, as taught by Roe (-588) as the lotion disclosed by Roe (-020).

With respect to claim 3, the chemical additive used by Roe (-588) also can function as a debonder, as it comprises molecules of mineral oil or mineral wax, which comprise fatty portions and alkyl chains, as described in column 10, line 60, through column 11, line 6.

With respect to claims 4, 7, and 8, the chemical additive used by Roe (-588) may be a silicone polymer, as described in column 11, lines 48-62, where  $R_1$  and  $R_2$  may be alkyl radicals, which are cationic and act as a base. The silicone polymer may further comprise an acidic functional group such as a carboxylic acid, as disclosed in column 12, lines 3-6, making the compound amphoteric.

With respect to claim 11, the nit conditioner used by Roe (-588) also can function as a surfactant, as it may be in the form of a fatty acid ester type of mineral wax, as described in column 10, lines 60-66. This structure is anionic.

With respect to 36, the nit conditioner used by Roe (-588) also is a quaternary amine agent, as described in column 11, line 48, to column 12, line 6.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al. (6,156,020).



Roe discloses all aspects of the claimed invention but remains silent as to the amount of nit conditioner used. The nit conditioner disclosed by Roe is a lotion, and it is well-known in the art that an increase in the amount of lotion used directly results in an increased benefit to the skin of the user. It would therefore be obvious to one of ordinary skill in the art at the time of invention to include more than 0.1% by mass of nit conditioner in the pouch of Roe.

Claims 12-13 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al. (6,156,020) in view of Chambers et al. (5,597,873).

Roe discloses all aspects of the claimed invention with the exception of the AUL value and Centrifuge Retention Capacity value of the free-flowing particles. Roe discloses in column 19, line 39, the free-flowing particles comprise superabsorbent material.

Chambers teaches the use of superabsorbent material having an AUL value of greater than 10 g/g and a Centrifuge Retention Capacity of greater than 1.5 g/g, as described in column 4, lines 43-55. The superabsorbent material having these characteristics exhibits improved dryness and leak prevention, as disclosed in column 4, lines 53-55.

It would therefore be obvious to one of ordinary skill in the art at the time of invention for the free-flowing particles of Roe to have an AUL value of greater than 10 g/g and a Centrifuge Retention Capacity of greater than 1.5 g/g, as taught by Chambers, to provide improved dryness and leak prevention.

Claims 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al. (6,156,020) in view of Bernardin (5,009,650).

Roe discloses all aspects of the claimed invention with the exception of nits comprising 50% eucalyptus fibers, and free-flowing particles comprising a hardwood. Roe discloses the use of cellulosic fibers as the nits or free-flowing particles 172, as described in column 19, lines 37-38, but remains silent as to the type of plant material from which the fibers are take.

Bernardin discloses an absorbent article, as shown in figure 1, comprising a layer of 50% hardwood eucalyptus fibers and 50% softwood fibers, as described in column 11, lines 25-29. The addition of 50% hardwood eucalyptus fibers to the layer significantly improve the wicking ability of the layer, as described in column 11, lines 43-50.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the nits and free-flowing particles of Roe from 50% eucalyptus fibers to improve the wicking ability of the article, as taught by Bernardin.

Claims 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al. (6,156,020) in view of Bewick-Sonntag et al. (5,762,641).

Roe discloses all aspects of the claimed invention but remains silent as to the size of the pouch 152. Bewick-Sonntag discloses a suitable width for the crotch region of a diaper as being 10.2 cm, as described in column 11, lines 15-18. Given this width

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for the crotch region of the diaper disclosed by Roe in figure 5, the pouch 152 measures about 4 cm in width and about 11 cm in length. The diaper dimensions disclosed by Bewick-Sonntag result in a diaper of a size that is comfortable for a baby weighing 9-17 kg, as described in column 11, lines 15-18. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the diaper of Roe with the dimensions of Bewick-Sonntag to create a diaper of a size comfortable for an infant.

With respect to claim 20, it would have been an obvious matter of design choice to make the pouch 3 cm wide rather than 5 cm wide, since the applicant has not disclosed that the width of the pouch being 3 cm wide solves any stated problem or serves any particular purpose. It appears the invention would function equally well with a pouch having a width of 5 cm as a pouch having a width of 3 cm.

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roe et al. (6,156,020).

Roe discloses all aspects of the claimed invention but remains silent as to the amount of chemical additive used. The chemical additive disclosed by Roe is a hydrophobic lotion, and it is well-known in the art that an increase in the amount of lotion used directly results in an increased benefit to the skin of the user. It would therefore be obvious to one of ordinary skill in the art at the time of invention to include more than 0.02% by mass of nit conditioner in the pouch of Roe.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (571) 272-4932. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tanya Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

UNA  
cla  
August 16, 2006

**TATYANA ZALUKAEVA**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'Tatyana', written over the printed name of the examiner.